

### MARKED-UP COPY OF AMENDMENTS TO THE CLAIMS

Claims are amended as follows:

1. (Amended) An encapsulated electrophoretic element comprising a stratum having a substantially uniform thickness of about 10  $\mu\text{m}$  to about 500  $\mu\text{m}$ , the stratum comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate, a binder in association with the capsules, and a layer of material, the capsules and the binder forming a film, the layer of material substantially filling any interstices formed within the film.
4. (Canceled) ~~The element of claim 1 wherein the plurality of capsules are disposed on the substrate and are in association with a binder, thereby to form a film.~~
5. (Amended) The element of claim 41 wherein the film comprises closely-packed capsules.
6. (Amended) The element of claim 41 wherein the binder comprises a binder solid and wherein a ratio of a mass of the binder solid to a mass of the capsules of at least a portion of the element is from about 1:2 to about 1:20.
7. (Amended) The element of claim 41 wherein at least a portion of the element has an optically active fraction of at least 70%.
8. (Canceled) ~~The element of claim 4 further comprising a layer of material substantially filling any interstices formed within the film.~~
9. (Amended) The element of claim 81 wherein the layer of material is substantially planar on a side opposite the film.
10. (Canceled) ~~The element of claim 8 wherein the capsules, the binder, and the layer of material comprise a stratum having a substantially uniform thickness.~~
11. (Canceled) ~~The element of claim 10 wherein the stratum has a thickness of about 10  $\mu\text{m}$  to about 500  $\mu\text{m}$ .~~

12. (Amended) The element of claim 8-1 wherein the layer of material comprises the binder.

13. (Amended) The element of claim 8-1 wherein the layer of material comprises an insulator.

14. (Amended) The element of claim 8-1 wherein the layer of material is tacky during at least one of prior to, during, and after substantially filling the interstices within the film.

15. (Amended) The element of claim 8-1 wherein the layer of material is in a liquid state during at least one of prior to, during, and after substantially filling the interstices within the film.

16. (Amended) The element of claim 8-1 wherein the capsules, the binder, and the layer of material comprise a stratum that is substantially free from voids.

17. (Amended) The element of claim 8-1 wherein the layer of material has a thickness of less than or equal to about 50  $\mu\text{m}$ .

18. (Amended) The element of claim 8-1 wherein the layer of material comprises a conductor.

19. (Amended) The element of claim 8-1 wherein the layer of material comprises a semiconductor.

20. (Amended) The element of claim 8-1 wherein the layer of material comprises an adhesive containing a material selected from the group consisting of carbon particles, gold particles, aluminum particles, platinum particles, silver particles, plated polymer spheres, plated glass spheres, and indium tin oxide particles.

21. (Amended) The element of claim 8-1 wherein the layer of material comprises an adhesive containing a material selected from the group consisting of polyacetylene, polyaniline, polypyrrole, polyethylene dioxythiophene, and polythiophene.

22. (Amended) The element of claim 8-1 further comprising a rear substrate disposed adjacent the layer of material.

23. (Amended) The element of claim 22 wherein the layer of material is ~~initially~~-associated with the film before a lamination procedure of the film is completed.

24 (Amended) The element of claim 22 wherein the layer of material is ~~initially~~-associated with the rear substrate before a lamination procedure of the film is completed.

40. (Canceled) ~~An encapsulated electrophoretic display comprising at least one element, the element comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate.~~

93. (Canceled) ~~An encapsulated electrophoretic element comprising a plurality capsules disposed substantially in a single layer on a substrate and associated with a binder, thereby to form a film, wherein at least a portion of the element has an optically active fraction of at least 70%.~~

95. (Canceled) ~~An encapsulated electrophoretic display comprising at least one element, the element comprising a plurality capsules disposed substantially in a single layer on a substrate and associated with a binder, thereby to form a film, wherein at least a portion of the element has an optically active fraction of at least 70%.~~

96. (Canceled) ~~An encapsulated electrophoretic element comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate, thereby to form a film~~

97. (Canceled) ~~An encapsulated electrophoretic display comprising at least one element, the element comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate, thereby to form a film.~~

98. (New) An encapsulated electrophoretic element comprising a film, the film formed by a plurality of non-spherical capsules disposed substantially in a single layer on a substrate and a binder in association with the capsules, the binder comprising a binder solid, a ratio of a mass of the binder solid to a mass of the capsules of at least a portion of the element being from about 1:2 to about 1:20.

99. (New) An encapsulated electrophoretic element comprising a film and a layer of material having a thickness of less than or equal to about 50  $\mu\text{m}$ , the film formed by a plurality of non-spherical capsules disposed substantially in a single layer on a substrate and a binder in association with the capsules, the layer of material substantially filling any interstices formed by the binder and the capsules within the film.
100. (New) An encapsulated electrophoretic element comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate having a thickness of about 25  $\mu\text{m}$  to about 500  $\mu\text{m}$ .
101. (New) An encapsulated electrophoretic element comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate, each capsule being defined by a respective capsule wall having a thickness from about 0.2  $\mu\text{m}$  to about 10  $\mu\text{m}$ .

Applicants: Albert et al.

Ser. No.: 09/413,444

Filed: October 6, 1999

Page 11

### CLEAN COPY OF ALL PENDING CLAIMS

a1 1. (Amended) An encapsulated electrophoretic element comprising a stratum having a substantially uniform thickness of about 10  $\mu\text{m}$  to about 500  $\mu\text{m}$ , the stratum comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate, a binder in association with the capsules, and a layer of material, the capsules and the binder forming a film, the layer of material substantially filling any interstices formed within the film.

2. The element of claim 1 wherein the capsules are of substantially uniform size.

3. The element of claim 1 wherein the capsules are substantially planar on at least one side proximate the substrate.

4. (Canceled)

a2 5. (Amended) The element of claim 1 wherein the film comprises closely-packed capsules.

6. (Amended) The element of claim 1 wherein the binder comprises a binder solid and wherein a ratio of a mass of the binder solid to a mass of the capsules of at least a portion of the element is from about 1:2 to about 1:20.

7. (Amended) The element of claim 1 wherein at least a portion of the element has an optically active fraction of at least 70%.

8. (Canceled)

a3 9. (Amended) The element of claim 1 wherein the layer of material is substantially planar on a side opposite the film.

10. (Canceled)

11. (Canceled)

a4 12. (Amended) The element of claim 1 wherein the layer of material comprises the binder.

13. (Amended) The element of claim 1 wherein the layer of material comprises an insulator.

14. (Amended) The element of claim 1 wherein the layer of material is tacky during at least one of prior to, during, and after substantially filling the interstices within the film.

15. (Amended) The element of claim 1 wherein the layer of material is in a liquid state during at least one of prior to, during, and after substantially filling the interstices within the film.

16. (Amended) The element of claim 1 wherein the capsules, the binder, and the layer of material comprise a stratum that is substantially free from voids.

17. (Amended) The element of claim 1 wherein the layer of material has a thickness of less than or equal to about 50  $\mu\text{m}$ .

18. (Amended) The element of claim 1 wherein the layer of material comprises a conductor.

19. (Amended) The element of claim 1 wherein the layer of material comprises a semiconductor.

20. (Amended) The element of claim 1 wherein the layer of material comprises an adhesive containing a material selected from the group consisting of carbon particles, gold particles, aluminum particles, platinum particles, silver particles, plated polymer spheres, plated glass spheres, and indium tin oxide particles.

21. (Amended) The element of claim 1 wherein the layer of material comprises an adhesive containing a material selected from the group consisting of polyacetylene, polyaniline, polypyrrole, polyethylene dioxythiophene, and polythiophene.

22. (Amended) The element of claim 1 further comprising a rear substrate disposed adjacent the layer of material.

23. (Amended) The element of claim 22 wherein the layer of material is associated with the film before a lamination procedure of the film is completed.

24. (Amended) The element of claim 22 wherein the layer of material is associated with the rear substrate before a lamination procedure of the film is completed.

---

25. The element of claim 22 wherein the rear substrate comprises a material selected from the group consisting of a polymeric material, a glass, and a metal.
26. The element of claim 22 wherein the rear substrate comprises at least one electrode.
27. The element of claim 22 wherein the rear substrate comprises at least one transistor.
28. The element of claim 27 wherein the transistor comprises a silicon-based material.
29. The element of claim 27 wherein the transistor comprises an organic material.
30. The element of claim 22 wherein the rear substrate comprises at least one diode.
31. The element of claim 1 wherein the substrate comprises a polymeric material.
32. The element of claim 1 wherein the substrate comprises at least one electrode.
33. The element of claim 32 wherein the electrode comprises indium tin oxide.
34. The element of claim 1 wherein the substrate comprises a polyester film.
35. The element of claim 1 wherein the substrate has a thickness of about 25  $\mu\text{m}$  to about 500  $\mu\text{m}$ .
36. The element of a claim 1 wherein each capsule is defined by a respective capsule wall having a thickness from about 0.2  $\mu\text{m}$  to about 10  $\mu\text{m}$ .
37. The element of claim 1 wherein the capsules comprise a polymer matrix having fluid-containing cavities.
38. The element of claim 1 wherein at least one of the capsules includes a suspending fluid and at least one species of particle.
39. The element of claim 1 wherein at least one of the capsules includes at least two species of electrophoretic particles, wherein an optical property of a first species of particle is different from a second species of particle.

40. (Canceled)

41-91. (Restricted out).

92. An encapsulated electrophoretic element comprising a plurality of capsules disposed substantially in a single layer on a substrate and in association with a binder, thereby to form a film, wherein the binder comprises a binder solid and wherein a ratio of a mass of the binder solid to a mass of the capsules of at least a portion of the element is from about 1:2 to about 1:20.

93. (Canceled)

94. An encapsulated electrophoretic display comprising at least one element, the element comprising a plurality of capsules disposed substantially in a single layer on a substrate and in association with a binder, thereby to form a film, wherein the binder comprises a binder solid and wherein a ratio of a mass of the binder solid to a mass of the capsules of at least a portion of the element is from about 1:2 to about 1:20.

95. (Canceled)

96. (Canceled) .

97. (Canceled) .

---

98. (New) An encapsulated electrophoretic element comprising a film, the film formed by a plurality of non-spherical capsules disposed substantially in a single layer on a substrate and a binder in association with the capsules, the binder comprising a binder solid, a ratio of a mass of the binder solid to a mass of the capsules of at least a portion of the element being from about 1:2 to about 1:20.

99. (New) An encapsulated electrophoretic element comprising a film and a layer of material having a thickness of less than or equal to about 50  $\mu\text{m}$ , the film formed by a plurality of non-spherical capsules disposed substantially in a single layer on a substrate and a binder in association with the capsules, the layer of material substantially filling any interstices formed by the binder and the capsules within the film.



Applicants: Albert et al.

Ser. No.: 09/413,444

Filed: October 6, 1999

Page 15

as 100. (New) An encapsulated electrophoretic element comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate having a thickness of about 25  $\mu\text{m}$  to about 500  $\mu\text{m}$ .

101. (New) An encapsulated electrophoretic element comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate, each capsule being defined by a respective capsule wall having a thickness from about 0.2  $\mu\text{m}$  to about 10  $\mu\text{m}$ .

---